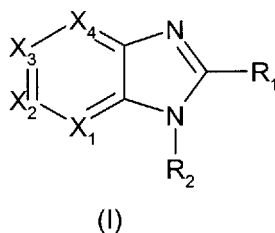


**Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Claims 1 to 19 (cancelled).**

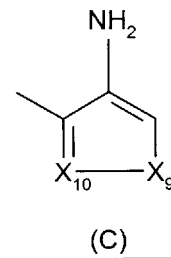
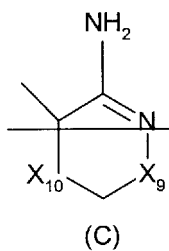
20. (Currently Amended) A compound of the general formula (I)



and physiologically acceptable salts and or N-oxides thereof wherein,

$X^3$  is N,  $X^4$  is  $CR^6$ ,  $X^1$  is  $CR^3$ , and  $X^2$  is  $CR^4$ ;

$R^1$  is a group C



wherein  $X_9$  is O and  $X_{10}$  is N;

$R_2$  represents hydrogen, hydroxy, aryl, heteroaryl,  $C_{3-7}$ cycloalkyl, heterocyclyl, a group  $YR_{12}$ ,  $N=R_{13}$ ,  $CONR_{14}R_{15}$ ,  $COCH_2NR_{19}R_{20}$ ,  $NR_{14}COR_{16}$ ,  $SO_2NR_{14}R_{15}$  or  $C_{1-6}$ alkyl [optionally substituted by a group selected from optionally substituted phenyl,  $C_{3-7}$ cycloalkyl, heteroaryl, heterocyclyl, acylamino,  $NH_2$ ,  $R_{19}NH$ ,  $R_{19}R_{20}N$ ,  $SO_2NR_{14}R_{15}$ ,  $CONR_{14}R_{15}$ ,  $NR_{14}COR_{16}$ ,  $OalkNR_{19}R_{20}$ ,  $SalkNR_{19}R_{20}$  or  $NR_{17}SO_2R_{18}$  group];

R<sub>3</sub>, R<sub>4</sub>, and R<sub>6</sub>, independently represent a group selected from hydrogen, halogen, hydroxy, R<sub>19</sub>O, R<sub>19</sub>S(O)<sub>n</sub>, NH<sub>2</sub>, R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, nitro, formyl, C<sub>1-4</sub>alkanoyl, alkenyl (optionally substituted by optionally substituted phenyl, heterocyclyl, or heteroaryl), carboxy, optionally substituted phenyl, heteroaryl, cycloalkyl, cycloalkylalkyl, aryloxy, heteroaryloxy, heterocyclyl, CONR<sub>14</sub>R<sub>15</sub>, NR<sub>14</sub>COR<sub>16</sub>, SO<sub>2</sub>NR<sub>14</sub>R<sub>15</sub>, NR<sub>17</sub>SO<sub>2</sub>R<sub>18</sub> or C<sub>1-6</sub>alkyl [optionally substituted by a group selected from optionally substituted phenyl, C<sub>3-7</sub>cycloalkyl, heteroaryl, heterocyclyl, NH<sub>2</sub>, R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, acylamino, hydroxy, CONR<sub>14</sub>R<sub>16</sub>, NR<sub>14</sub>COR<sub>16</sub>, SO<sub>2</sub>NR<sub>14</sub>R<sub>15</sub>, NR<sub>17</sub>SO<sub>2</sub>R<sub>18</sub>, OalkNR<sub>19</sub>R<sub>20</sub>, or SalkNR<sub>19</sub>R<sub>20</sub> group];

R<sub>19</sub> and R<sub>20</sub> independently represent a group selected from C<sub>1-6</sub> alkyl, C<sub>3-7</sub>cycloalkyl, C<sub>3-7</sub>cycloalkylalkyl, aryl, aralkyl, heteroaryl, heteroarylalkyl, heterocyclyl or heterocyclylalkyl; Y represents O, NH, NR<sub>12</sub> or S(O)<sub>n</sub>;

R<sub>12</sub> represents aryl, heteroaryl, cycloalkyl, heterocyclyl or C<sub>1-6</sub>alkyl [optionally substituted by a group selected from optionally substituted phenyl, C<sub>3-7</sub>cycloalkyl, heteroaryl, heterocyclyl, NH<sub>2</sub>, R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, acylamino, hydroxy, CONR<sub>14</sub>R<sub>15</sub>, NR<sub>14</sub>COR<sub>16</sub>, SO<sub>2</sub>NR<sub>14</sub>R<sub>15</sub>, NR<sub>17</sub>SO<sub>2</sub>R<sub>18</sub>, OalkNR<sub>19</sub>R<sub>20</sub>, or SalkNR<sub>19</sub>R<sub>20</sub> group];

R<sub>13</sub> represents an alkylidene group which may be substituted by an aryl, heteroaryl, heterocyclyl or cycloalkyl group or R<sub>13</sub> represents a cycloalkylidene or heterocycloalkylidene group;

R<sub>14</sub> and R<sub>15</sub> independently represent hydrogen, aryl, heteroaryl, cycloalkyl or C<sub>1-6</sub>alkyl [optionally substituted by a group selected from optionally substituted phenyl, C<sub>3-7</sub>cycloalkyl, heteroaryl, heterocyclyl, NH<sub>2</sub>, R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, or acylamino group] or R<sub>14</sub> and R<sub>15</sub> together with the nitrogen atom to which they are attached form a 4-7 heterocyclic ring which may be saturated or unsaturated and optionally contains another heteroatom selected from O, N or S(O)<sub>n</sub>;

R<sub>16</sub> and R<sub>18</sub> independently represent ,aryl, heteroaryl,

heterocyclyl, cycloalkyl or C<sub>1-6</sub>alkyl [optionally substituted by a group selected from optionally substituted phenyl, C<sub>3-7</sub>cycloalkyl, heteroaryl, heterocyclyl, NH<sub>2</sub>,

R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, or acylamino group] or the group NR<sub>14</sub>R<sub>15</sub> wherein R<sub>14</sub> and R<sub>15</sub> have the meanings defined above;

R<sub>17</sub> represents hydrogen, aryl, heteroaryl, heterocyclyl, cycloalkyl or C<sub>1-6</sub>alkyl [optionally substituted by a group selected from optionally substituted phenyl, C<sub>3-7</sub>cycloalkyl, heteroaryl, heterocyclyl, NH<sub>2</sub>, R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, or acylamino group];

Alk is a C<sub>2-4</sub> straight or branched alkylene chain

n is zero, 1 or 2.

21. (Previously Presented) A compound as claimed in claim 20 wherein R<sub>2</sub> represents hydrogen, C<sub>1-6</sub>alkyl, C<sub>3-7</sub> cycloalkyl, C<sub>3-7</sub> cycloalkylmethyl, phenyl or phenyl substituted by ( amino, dialkylamino, dialkylaminoalkylamino, alkyl, alkanoyl, alkoxy, halo, hydroxy, aminoalkyl, hydroxalkoxy, aminoalkoxy, alkylaminoalkoxy, N-alkyl-Nalkylaminoalkoxy, aminocarbonylalkoxy, alkylaminocarbonylalkoxy, dialkylaminocarbonylalkoxy, ureidoalkoxy, alkylureido, dialkylamino-acetamido, alkylthioalkoxy, phenylthioalkoxy, alkylsulphinyloxy, phenylsulphinyloxy, alkylsulphonyloxy, phenylsulphonyloxy, cyanoalkoxy, acylaminoethoxy, alkylsulphonylaminoalkoxy, phenylsulphonylaminoalkoxy, alkoxycarbonylalkoxy, heterocyclylalkoxy, heterocycliloxy, heterocyclyl), alkyl substituted by ( hydroxy, amino, acylamino, R<sub>19</sub>NH, R<sub>19</sub>R<sub>20</sub>N, a 4-7-membered heterocyclyl group), a 4-7 membered heterocyclyl group, a 5,6 fused bicyclic heteroaryl group, a 6,6 fused bicyclic heterocyclic group, a 6,5 fused heterocyclic group or a 6,7 fused heterocyclic group.

22. (Previously Presented) A compound as claimed in claim 20 wherein R<sub>2</sub> represents hydrogen, methyl, ethyl, isopropyl, sec butyl, 2-ethylbutyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, cyclopropylmethyl, cyclohexylmethyl, phenyl, phenyl substituted by[ amino 4 - dimethylamino, dimethylaminoethylamino, N-methyl, dimethylaminoethylamino, N,N-bis(2-dimethylaminoethyl)amino), ethyl, acetyl, methoxy 3-methylbutoxy, chlorine, bromine, hydroxy, aminomethyl, 2-hydroxyethoxy, 3-hydroxypropoxy, 2-aminoethoxy, 2-methylaminoethoxy, 2-dimethylaminoethoxy, 2-diethylaminoethoxy, 2-diethylamino-1-methylethoxy, 2-disopropylamino-1-methylethoxy, N-N-benzyl N-methylaminoethoxy, aminocarbonylmethoxy, aminocarbonyl-2-methylethoxy, aminocarbonylethoxy, methylaminocarbonylmethoxy, dimethylaminocarboxymethoxy, ureidomethoxy, 3-methylureido, dimethylaminoacetamido, methylthiomethoxy, phenylthiomethoxy, methylsulphinylmethoxy, phenylsulphinylmethoxy, methylsulphonylmethoxy, phenylsulphonylmethoxy, cyanomethoxy, 2-cyanoethoxy, t-butoxycarbonylaminoethoxy, isoxazolylaminoethoxy, isonicotinylaminoethoxy, methylsulphonylaminoethoxy, phenylsulphonylaminoethoxy, 2-methoxycarbonyl 1-methylethoxy, morpholinoethoxy, piperidinoethoxy, 1-pyrrolidino-2-ylmethoxy, 1-methylpiperidino-4-yloxy or 3-pyrrolidinyl, 2-hydroxy-1-methyl-ethyl, 3-aminopropyl, 4-aminobutyl, 5-aminopentyl, 4-butyloxycarbonylamino-butyl, 2-dimethylamino-1-methylethyl, 4-diethylamino-1-methyl-butyl, 3-dimethylaminopropyl, 4-methylpiperazin-1-ethyl, 2-piperazin-yl-ethyl, piperidine 4-yl methyl, piperidine 3-yl methyl, piperidin-4-yl, piperidin-3-yl, pyrrolidin-3-yl, 5-indazolyl or 6-indazolyl, tetrahydroisoquinolin-5-yl, 2-methyl tetrahydroisoquinolin-7-yl, 2-methanesulphonyl-tetrahydroisoquinolin-7-yl, tetrahydroisoquinolin-7-yl, 3,4 dihydro-2H-isoquinolin-1-one-7-yl, 2,3-dihydro-1H-isoindol-5-yl, benzo{1,3}dioxol-5-yl or 2,3,4,5-tetrahydro-1H-benzo[c]azepin-8-yl.

23. (Previously Presented) A compound as claimed in claim 20 wherein  $R_3$  represents hydrogen, halogen, hydroxy, carboxyl, phenyl or phenyl (substituted by one or two groups selected from alkoxy, hydroxy, hydroxymethyl, trifluoromethyl, trifluoromethoxy, amino, acetamido, aminoalkyl, alkyl, carboxyl carboxamido, N,N-dimethylcarboxamido, cyano, formyl, phenoxy,  $CH_3S(O)_n$  wherein  $n$  is zero, 1 or 2,  $CH_3SO_2NH$ , or halogen), or heterocyclyl, heteroaryl, 6,5-fused bicycloheterocyclyl, an optionally substituted phenyl substituted by the group  $CH_2NR_{19}R_{20}$  wherein  $R_{19}$  is alkyl, phenyl or a heterocyclic group and  $R_{20}$  is hydrogen or methyl, or  $NR_{19}R_{20}$  is a 4-7 heterocyclic group, alkyl substituted by (a 4-7 membered heterocyclyl group or a group  $NR_{19}R_{20}$  (wherein  $R_{19}$  is hydroxylalkyl, optionally substituted benzyl, C<sub>3-7</sub> cycloalkyl, a heterocyclic group, a 4-7 membered heterocyclalkyl or C<sub>3-7</sub> cycloalkylalkyl,  $R_{20}$  is hydrogen, methyl or acetyl), 4-heterocycloxy, heterocyclalkyloxy, vinyl (optionally substituted by optionally substituted phenyl),  $CONR_{14}R_{15}$  wherein  $R_{15}$  is hydrogen,  $R_{14}$  is benzyl, phenethyl, aminoalkyl, 4-7 membered heterocyclyl or 4-7 membered heterocyclalkyl, or  $R_{14}$  and  $R_{15}$  together with the nitrogen atom to which they are attached represent a 4-7 membered heterocyclyl group, a group  $R_{19}S(O)_n$  (wherein  $n$  is zero, 1 or 2 and  $R_{19}$  is optionally substituted phenyl), or a group  $R_{19}NH$  and  $R_{19}$  is optionally substituted phenyl or heteroaryl.

24. (Previously Presented) A compound as claimed in claim 20 wherein  $R_3$  represents hydrogen, bromine, hydroxy, carboxyl, phenyl or phenyl (substituted by one or two groups selected from methoxy, ethoxy, hydroxy, hydroxymethyl, trifluoromethyl, trifluoromethoxy, amino, acetamido, aminomethyl, aminoethyl, methyl, ethyl, carboxyl, carboxamido, N,N-dimethylcarboxamido, cyano, formyl, phenoxy,  $CH_3S(O)_n$  wherein  $n$  is zero, 1 or 2,  $CH_3SO_2NH$ , or fluorine), 5-methyl-1,2,4-oxadiazol-3-yl, 2-thienyl, 4-

methylthienyl, 5-phenylthienyl, 5-formylthienyl, or 3-thienyl, 2-furanyl, pyridyl such as 3-pyridyl or 4-pyridyl, 3,5-dimethylisoxazol-4-yl, indolyl or 8-quinoliny, benzothienyl, 5-benzo[1,3]dioxolyl, a phenyl or fluorophenyl substituted by the group  $\text{CH}_2\text{NR}_{19}\text{R}_{20}$  (wherein  $\text{NR}_{19}\text{R}_{20}$  represents ethylamino, dimethylamino, 4-morpholino, pyrrolidino, piperidino, piperidin-4-yl-amino or 1-t butoxycarbonyl-piperidin-4-yl-amino.), 3-hydroxypropylamino, 4-bromobenzylamino, 4-methoxybenzylamino, 4-piperidinylaminomethyl, N-4-piperidinyl-N-methylaminomethyl, 1-t butyoxycarbonyl-piperidinyl-aminomethyl  
4-aminopiperidinomethyl, 1,4-diazepan-1-ylmethyl, piperazinomethyl, 4-methylpiperazinomethyl, 4-acetylpiperizin-1-ylmethyl, 4-ethylpiperazinomethyl  
4-morpholinomethyl, piperidinomethyl, 4-(methylamino)piperidinomethyl, 4-cyclopropylaminopiperidinomethyl, pyrrolidinomethyl, 3-dimethylaminopyrrolidinomethyl, 2-hydroxymethylpyrrolidinomethyl, 4-ethylpiperazino-methyl, 3-pyrrolidin-1-yl-propylaminomethyl, 4-(4-fluorophenyl) piperazinomethyl, 3-piperidinyl-1-yl-propylaminomethyl, 3-morpholin-4-yl-propylaminomethyl, 3-(4-methylpiperazin-yl propylaminomethyl, 1-methyl piperidin-4-yl-aminomethyl, 4-pyrrolidinocarbonylmethyl-piperazinomethyl, 2-pyrrolidin-1-ylmethylpyrrolidinomethyl, 2-pyrrolidin-1-yl-ethylaminomethyl, 3-dimethylaminopyrrolidinomethyl, 1-methyl-piperidin-4-ylaminomethyl, 1-isopropyl-piperidin-4-ylaminomethyl, 3-dimethylaminopyrrolidinomethyl, 2-(morpholin-yl-methyl)-pyrrolidinomethyl, 3-piperidin-1-yl-propylaminomethyl, 3-morpholin-4-yl-propylaminomethyl, 3-(4-methylpiperazin-1-ylpropylaminomethyl, piperidin-1-ylmethylpyrrolidinomethyl, 3,5-dimethylpiperazinomethyl, pyrrolidin-1-ylpiperidinomethyl, pyrrolidino-3-ylaminomethyl, pyrrolidin-2-ylmethylaminomethyl, 4-aminomethylcyclohexylaminomethyl, 4-aminocyclohexylaminomethyl, 2-piperazin-1-ylethylaminomethyl, 3-amino-pyrrolidinomethyl, pyrrolidino-2-ylmethylaminomethyl, piperidin-4-ylmethylaminomethyl, 4-aminomethylpiperidinomethyl, 4-(cyclopropylaminopiperidinomethyl, 3-(piperazino-1-yl) propylaminomethyl, 2-(morpholin-4ylmethyl)pyrrolidinomethyl

2-(piperidin-1-ylmethyl)pyrrolidinomethyl, 2-(piperazin-1-ylmethyl)pyrrolidinomethyl, piperidin-4-ylmethyl, N-piperidin-4-yl-acetamidomethyl, piperidin-4-yloxy, or piperidin-4-ylmethoxy,

4-methoxystyryl,  $\text{CONR}_{14}\text{R}_{15}$

wherein  $\text{R}_{15}$  is hydrogen,  $\text{R}_{14}$  is benzyl, phenethyl, 3-aminopropyl, 4-aminobutyl, 6-aminohexyl, 3 or 4-piperidinyl 1-aminomethylcarbonyl-piperidin-4-yl, 3-pyrrolidinyl, piperidin-2-ylmethyl or piperidin-4-ylmethyl, morpholin-2-ylmethyl or piperazinoethyl, or  $\text{R}_{14}$  and  $\text{R}_{15}$  together with the nitrogen atom to which they are attached represent piperazino, 1-methylpiperazino, 4-(2-aminoethyl)piperazino, 4-(t-butoxycarbonylaminoethyl)piperazino, 4-aminomethylcarbonylpiperazino, 4-aminoethylcarbonylpiperazino, 4-1-(aminoethylcarbonylpiperazino, 4-(1-methylaminoethylcarbonylpiperazino, 4-pyrrolidin-2-yl-carbonylpiperazino, pyrrolidino, 3-aminopyrrolidino, 2-methoxycarbonylpyrrolidino, morpholino, 2-(pyrrolidin-1-yl)methyl pyrrolidino, a group  $\text{R}_{19}\text{S}(\text{O})_n$  wherein  $n$  is zero, and  $\text{R}_{19}$  is phenyl optionally substituted by methoxy, a group  $\text{R}_{19}\text{NH}$  wherein  $\text{R}_{19}$  is phenyl, 4-morpholinophenyl or 3-aminopyridyl.

25. (Previously Presented) A compound as claimed in claim 20 wherein  $\text{R}_4$  is hydrogen, methyl, methoxy, methylthio, phenylamino or phenoxy optionally substituted by fluorine or acetamido.

26. (Previously Presented) A compound as claimed in claim 20 wherein  $\text{R}_6$  is hydrogen, chlorine, hydroxymethyl, methyl, methoxy, phenyl, 1-pyrrolidinyl or 1-pyrazolyl.

27. (Currently Amended) A pharmaceutical formulation comprising a therapeutically effective amount of a compound according to claim 20 or a pharmaceutically

acceptable salt and or an N oxide thereof together with one or more pharmaceutically acceptable excipients and/or carriers.

28. (Currently Amended) The method of inhibiting ~~the effects of~~ the kinase Msk-1 which comprises the administration of a compound according to claim 20 and/or a physiologically acceptable salt thereof.

29. (Currently Amended) The method of inhibiting ~~the effects of~~ Rho-kinase 1 which comprises the administration of a compound according to claim 20 and/or a physiologically acceptable salt thereof.

30. (Currently Amended) The method of inhibiting ~~the effects of~~ Rho-kinase 2 which comprises the administration of a compound according to claim 20 and/or a physiologically acceptable salt thereof.